# UPPER COOK INLET SUBSISTENCE AND PERSONAL USE FISHERIES, REPORT TO THE ALASKA BOARD OF FISHERIES, 1992

Ву

Jeff Fox

and

Paul H. Ruesch

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Alaska Department of Fish and Game Division of Commercial Fisheries, Central Region 333 Raspberry Road Anchorage, Alaska 99581

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### ALASKA DEPARTMENT OF FISH AND GAME DIVISION OF COMMERCIAL FISHERIES

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PERSONAL USE FISHERIES, REPORT
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Regional Information Report<sup>1</sup> 2A92-20

Submitted by:

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<sup>&</sup>lt;sup>1</sup> Contribution 92-20 from the Soldotna area office. The Regional Information Report Series was established in 1987 to provide an information access system for all unpublished divisional reports. These reports frequently serve diverse ad hoc informational purposes or archive basic uninterpreted data. To accommodate timely reporting of recently collected information, reports in this series undergo only limited internal review and may contain preliminary data; this information may be subsequently finalized and published in the formal literature. Consequently, these reports should not be cited without prior approval of the author or the Division of Commercial Fisheries.

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#### INTRODUCTION

The subsistence harvest of fish and game resources in the State of Alaska has been one of the most contentious issues since the passage of the subsistence statute in 1978. This statute, in conjunction with Title VII of the Alaska National Interest Lands Conservation Act, (ANILCA, 1980) gave "priority" to the subsistence harvest of fish and game resources by rural residents over other users. Since this time the subsistence statute has received numerous challenges and adjustments in the court system and the Alaska State Legislature. In 1985 as a result of the Madison et al. vs. Alaska Board of Fisheries decision, all Alaska residents qualified as subsistence users. More liberal subsistence fisheries were established under emergency regulations for the 1985 season. Prior to the 1986 fishing season the Alaska Legislature passed legislation which again limited subsistence to rural residents. As a result of the McDowell v. State of Alaska decision by the Alaska Supreme Court in 1989 the "rural" requirement was severed from state statute. As a result of the court's ruling the Joint Boards of Fish and Game announced the "all Alaskans policy" in October of 1990 which stated that all Alaskan residents are subsistence users under a Tier I classification.

In December of 1990, shortly after creation of the "All Alaskans Policy" the Alaska Board of Fisheries (BOF) convened for the regularly scheduled meeting covering Upper Cook Inlet to promulgate subsistence, commercial, sport and personal use regulations. After a great deal of public testimony and much heated debate the Upper Cook Inlet Subsistence Salmon Management Plan was created. In addition to subsistence regulations the BOF modified existing personal use fisheries in the Central District of Upper Cook Inlet to minimize the impacts of these newly expanded subsistence fisheries. In a subsequent BOF meeting in May of 1991 the subsistence plan was reviewed and no action was taken, however there was still a great deal of opposition from other user groups.

#### THE UPPER COOK INLET SUBSISTENCE SALMON FISHERY

The Upper Cook Inlet management area consists of that portion of Cook Inlet north of the latitude of Anchor Point and is divided into the Central and Northern Districts (Figure 1). Prior to the actions taken by the Board of Fish for the 1991 fishing season, the only area open to subsistence fishing in Upper Cook Inlet was the Tyonek subdistrict on the west side of Cook Inlet in the Northern District.

Under the Upper Cook Inlet Subsistence Salmon Management Plan, promulgated by the BOF, subsistence fishing would be allowed in most marine water areas of Upper Cook Inlet normally open to commercial set gillnet fishing (Figure 2). In addition setnet fisheries were created in Knik Arm, as well as dip net fisheries in the mouths of the Kenai and Kasilof Rivers.

The annual bag and possession limits for this fishery were established at twenty-five salmon per permit-holder of which no more than five can be chinook salmon. In addition a household is allowed another ten salmon for each household member of which no more than one can be a chinook salmon. Subsistence periods were scheduled on select Wednesdays and Saturdays from 8:00 a.m. to 8:00 p.m. by

regulation.

The legal gear for this fishery consists of set gillnets and dip nets. The gear specifications in the set gillnet fishery are for a maximum length of 10 fathoms (60 feet) and no more than 45 meshes in depth. Mesh size must be greater than four inches but may not exceed six inches. In the dip net fishery the legal gear consists of "a bag shaped net supported on all sides by a rigid frame. The maximum straight line distance between any two points on the net frame as measured through the net opening may not exceed five feet. The depth of the bag must be at least one half the greatest straight line distance as measured through the net opening. No portion of the bag may be constructed of webbing which exceeds a stretched measurement of 4.5 inches. The frame must be attached to a single rigid handle and be operated by hand."

#### 1991 Subsistence Fishery

A total of thirty-four days of subsistence fishing were created under this plan for the 1991 season. All areas and gear types were not open concurrently (Table 1). This fishing schedule was established in order to target on stocks which had "historically" been utilized for subsistence purposes while affording some protection to weaker stocks which had no "historical" subsistence use. A total of 7,065 permits were issued. Approximately 75 percent of the permits were returned as required and were used to generate harvest statistics. A total of 2,480 of the returned permits were used to take subsistence salmon under this plan. The remainder approximately 3,000, were not utilized. Anchorage area residents and Kenai Peninsula residents received the majority (89 percent) of the permits (Table 2, Figure 3). The number of years of residency for the permit recipients varied from 1 year to over seventy years (Figure 4).

The first period scheduled for May 18 was closed by the BOF at the May 1991 meeting. This was done to give the Department of Fish and Game sufficient time to get permits and regulations printed. Due to the delays in the review of the regulations in the Department of Law and the proximity of the fishery to the May BOF meeting, emergency regulations were issued on May 20 by Commissioner Rosier implementing all the regulations as adopted by the BOF for the 1991 Upper Cook Inlet fishing season. Under these emergency regulations the first subsistence fishery took place on May 25 with minor harvests of 230 chinook and 1,039 sockeye salmon being reported (Table 3). Eighty percent of this harvest was from the Upper Subdistrict of the Central District. Seventy percent of this Upper Subdistrict harvest was by gillnets. A total of 177 subsistence permits were active in Upper Cook Inlet on May 25 (Table 4).

On May 30, prior to the second scheduled period the emergency regulations issued by Commissioner Rosier were ruled invalid by Judge Cranston in the Kenai Superior Court. This injunction prevented all regulations covering the Upper Cook Inlet area which were implemented by emergency regulation from being utilized. Fisheries management reverted to the 1990 regulations during this period until the new regulations were reviewed by the Department of Law and signed by the Lieutenant Governor. In the interim the personal use gillnet fishery was prosecuted beginning June 21 at the mouth of the Kasilof River.

The 1991 BOF regulations were signed by the Lieutenant Governor on June 20, and

took effect 30 days later after public review, on July 21. The first scheduled subsistence fishery under these new regulations was on July 24.

On July 22, the commercial set gillnet fishery in the Upper Subdistrict of the Central District and the drift gillnet fishery in the Central District were closed during the regularly scheduled commercial period due to low sockeye escapements into the Kenai River. The Western Subdistrict of the Central District was also closed during the regularly scheduled commercial period due to low escapements into the Crescent River.

The subsistence fishery on July 24 proceeded as scheduled in all areas of Upper Cook Inlet including the Upper and Western Subdistricts of the Central District. This subsistence fishery was allowed to proceed because it would not have a significant impact on the escapement to either of the river systems which had not achieved the minimum escapement goal. This subsistence fishery as established by the BOF was much less efficient than a commercial fishery prosecuted in the same area. A total of 887 dip net permits were active in the Kenai and Kasilof Rivers during the July 24 period. The dip net harvest in this area was 8.750 salmon, approximately 99 percent were sockeye salmon. Setnet activity during this period was concentrated along the eastern shore of the Kenai Peninsula and in Knik Arm. Five hundred and seventy-six of the 770 active setnet permits were fished in the Upper Subdistrict of the Central District and 106 in Knik Arm of the Northern District. The Upper Subdistrict harvest was 13,700 sockeye and 200 chinook. The harvest in Knik Arm was 5 chinook, 2,144 sockeye, 789 coho, 189 pink and 649 chum salmon. The harvest in the remainder of Cook Inlet was 389 salmon, predominantly sockeye salmon.

Late in the day on July 24 Judge Cranston in the Kenai Superior Court issued a Temporary Restraining Order (TRO), effective until August 3, enjoining the Department from conducting a subsistence fishery in any area, if the resource could not sustain a commercial fishery in the regularly scheduled period prior to the scheduled subsistence fishery. Under this TRO all subsistence fisheries on July 27 in Upper Cook Inlet were closed by emergency order because the minimum escapement goals for sockeye in the Kenai and Susitna Rivers had not been achieved. On July 29 the minimum escapement goal in the Kenai River was achieved and the regular commercial period in the Central District on July 29 was allowed to take place. The Northern District commercial fishery remained closed for this July 29 period to secure the sockeye escapement goal in the Susitna River.

The next scheduled subsistence fishery on July 31 was allowed in the Central District however the Northern District was again closed by emergency order to stay within the guidelines established under Judge Cranston's TRO. A total of 358 permits were active during this fishery harvesting 3,425 salmon.

On August 3 all regularly scheduled subsistence fisheries took place in both the Central and Northern Districts. Effort levels declined to 236 permits, harvesting 4,109 salmon, roughly 55 percent of this harvest was in Knik Arm.

By regulation the August 7 subsistence period included only dip net fisheries in the Kenai and Kasilof River mouths. A total of 52 permits were active in this fishery harvesting 323 salmon.

On August 9 Judge Cranston invalidated the Upper Cook Inlet Subsistence Salmon Management Plan, eliminating any further subsistence fisheries in Upper Cook Inlet conducted under this plan. A total of five days of subsistence fishing were conducted under this plan. However not all areas were open each of these periods. The remaining subsistence periods, 5 in June, 7 in July, 7 in August and 8 in September were closed by court action.

#### Post Season Court Action

Two of the rulings from Judge Cranston have been appealed, by the State of Alaska, to the Alaska Supreme Court. The first decision related to the July 24 TRO which closed subsistence fisheries in which the regularly scheduled commercial fishing period immediately prior to the subsistence fishery had not occurred. This decision was reversed, basically reaffirming the "subsistence priority". The second decision referenced the Morry vs. State of Alaska decision which said that while all Alaska residents are eligible for subsistence, participation must be limited by some criteria. This decision was first "stayed" by the court to allow the subsistence fishery as established by the BOF to occur for the 1992 season. A final decision reversing the Superior Court ruling on the Morry case was later decided by the Alaska Supreme Court during the 1992 fishing season.

#### 1992 Subsistence Fishery

A total of thirty-five days of subsistence fishing were allowed under the Upper Cook Inlet Subsistence Salmon Management Plan in 1992. All areas were not open concurrently (Table 5). The fishery proceeded as scheduled for the entire season with no changes from the Court system. Approximately 9,500 permits were issued This data is currently being entered into a computerized for this fishery. database. No demographic information for the 1992 season is available at this time. A total of 3,849 permits (41 percent) were returned as of October 23, 1992 and were utilized to generate harvest statistics (Table 6). Of the returned permits 993 (26 percent) were not used to participate in this fishery, 34 percent were used to dip net fish and 40 percent were used to set gillnet. A small percentage of the permits were used to fish both gear types. Dipnetters harvested 32 percent of the total harvest, the majority being Kenai River sockeye. Set gillnets in the Upper Subdistrict accounted for the majority of the total harvest with 40 percent. The Knik Arm harvest was 14 percent of the total, followed closely by the Northern District west side, with 11 percent. Seventyfive percent of the total harvest was sockeye salmon, 17 percent coho, 3 percent pink, 3 percent chum and 2 percent chinook salmon.

#### Tyonek Subsistence Salmon Fishery

Created by court order in 1980, the Tyonek fishery was originally open only to those individuals domiciled in the village of Tyonek. Recent court decisions now allow any Alaska resident to participate although very few non-villagers seek permits. Only one permit is allowed per household and each permit holder is allowed a single ten-fathom net having a mesh size no greater than six inches.

No net may be operated within 600 feet of any other set gill net. Fishing periods are open from 4:00 a.m. to 8:00 p.m. each Tuesday, Thursday and Friday from May 15 to June 15 and from 6:00 a.m. to 6:00 p.m. each Saturday from June 16 to October 15. A harvest quota of 4,200 chinook salmon applies to the fishery prior to June 16. Chinook harvests in this fishery have ranged from 797 to 2,750 (Table 7).

#### Kasilof Sockeye Personal Use Fishery

Currently there are two set gillnet fisheries and three dip net fisheries that can be conducted in the Upper Cook Inlet Area. Under the Central District Personal Use Sockeye Salmon Management Plan, 5AAC 77.547 salmon may be taken with set gillnets in the Central District only in years when a subsistence fishery is not conducted in the Upper Subdistrict of the Central District. This fishery was created in 1982 and takes place in the waters closed to commercial fishing surrounding the mouth of the Kasilof River. The fishery is open to all Alaska residents holding a sport fishing license. Prior to 1986 a permit issued by the Department was required. The harvest is limited to 25 salmon per head of household with an additional 10 salmon per household member. Gear is limited to a single 10 fathom set gillnet with a mesh size no greater than 6 inches. Nets must be fished at least 100 feet apart and attended at all times. A quota of 5,000-10,000 salmon is applied to this fishery. The fishery opens on June 21 and continues daily from 6:00 a.m. to 6:00 p.m. until the quota is achieved. This fishery occurred each year from 1982 until 1991 (Table 8). This fishery did not take place in 1992 because of the subsistence fishery.

#### Fall Coho Personal Use Fishery

Created by the BOF in 1983 under the Central and Northern District Personal Use Coho Salmon Management Plan, AAC 77.548 this fishery is open to all Alaska residents holding a sport fishing license. Gear requirements are the same as for the personal use sockeye fishery described above. The harvest limits are also the same as for the personal use sockeye fishery however this limit, is a combined limit for both fisheries. The open area for this fishery is from the Department marker located one mile north of the Kasilof River to Point Possession, excluding normally closed waters at stream and river mouths. permit issued by the Department is required. Since its creation in 1983 this fishery has undergone many changes. Under the original 1983 plan this fishery opened after September 15 for a weekly 24 hour period, 12:00 noon Saturday until 12:00 noon Sunday with a harvest quota of 6,000 salmon. After the first period in 1983 on September 17-18 a Temporary Restraining Order halted this fishery until an out of court settlement allowed it to reopen on alternate weekends beginning October 23. There was no reported harvest after the initial September 17-18 period. In 1984 this fishery was changed by the BOF to the last three weekends in September with a harvest quota of 2,500 salmon. Fishing periods remained 12:00 noon Saturday to 12:00 noon Sunday. In 1985, after the Madison Decision, this fishery became a subsistence fishery. Fishing periods were on Mondays and Fridays from 7:00 a.m. to 7:00 p.m., August 16 to September 23. The legal gear was a single 35 fathom set gillnet with a mesh size no greater than six inches and 45 meshes in depth. In 1986, after passage of the subsistence

legislation limiting participation in subsistence to rural residents, this fishery reverted back to personal use. Gear, open area, time and harvest quotas also reverted back to 1984 regulations. These 1984 regulations remained in effect until 1992 when they were replaced by the subsistence fishery created by the 1990 Upper Cook Inlet Subsistence Salmon Management Plan. Harvests ^\have ranged from 712 to over 11,000 coho salmon (Table 9).

#### Personal Use Dip Net Fisheries

There are three personal use dip net fisheries in Upper Cook Inlet conducted under the Cook Inlet Personal Use Dip Net Fishery Management Plan, 5 AAC 77.545 which was created at the 1981 BOF meeting. As with other personal use fisheries, only Alaska residents may participate and a sport fishing license is required. The daily bag and possession limit is six salmon which are not in addition to other sport fishing limits. Chinook salmon must be released immediately. Legal gear is defined as "a bag shaped net supported on all sides by a rigid frame. The maximum straight line distance between any two points on the net frame as measured through the net opening may not exceed five feet. The depth of the bag must be at least one half the greatest straight line distance as measured through the net opening. No portion of the bag may be constructed of webbing which exceeds a stretched measurement of 4.5 inches. The frame must be attached to a single rigid handle and be operated by hand." Dip netting from a boat is legal under personal use and is very popular in the Kenai and Kasilof fisheries.

#### Kenai River Personal Use Dip Net Fishery

The area open to dip nets on the Kenai River extends from the Department regulatory markers located on the Cook Inlet beaches outside the terminus of the river, upstream to the downstream side of the Warren Ames bridge (Figure 5). Prior to 1987 this fishery occurred only in 1982 and 1983 with insignificant harvests (Table 10). Prior to 1989 this fishery was allowed when an escapement of 500,000 sockeye was projected. The goal was raised at the 1988 BOF meeting to 700,000. This fishery occurred again in 1989 with a record harvest of nearly 49,000 sockeye. In 1990 and 1991 no fishery occurred because the escapement did not reach 700,000. This fishery did occur again in 1992 with an estimated harvest of 8,700 salmon.

#### Kasilof River Personal Use Dip Net Fishery

The area open to dip nets on the Kasilof River extends from the Department regulatory markers located on the Cook Inlet beaches outside the terminus of the river upstream for a distance of one mile (Figure 6). Prior to the 1990 BOF meeting this fishery was allowed when the escapement into the Kasilof River was projected to exceed the minimum escapement goal of 150,000 sockeye. This fishery occurred each year between 1981 and 1988. Harvests during this time range from 1,800 to 38,670 salmon (Table 11). At the 1990 BOF meeting the escapement level that triggers this fishery was raised to 250,000 in years when a subsistence dip net fishery occurs in the Kasilof river. If no subsistence fishery occurs the personal use fishery will occur when the 150,000 minimum escapement is projected.

Since the 1988 season this fishery has not taken place.

#### Fish Creek Personal Use Dip Net Fishery

The area open to dip nets on Fish Creek extends from the Department regulatory markers located approximately 500 yards on both sides of the terminus of Fish Creek, to the Department regulatory markers located approximately one-quarter of a mile upstream of the Knik-Goose Bay Road. The Department may open this fishery on July 30 if the spawning escapement into the Big Lake drainage is projected to exceed 50,000 sockeye. Coho salmon must be released. The fishery will close on the second Friday in August or earlier by emergency order. Since 1987 this fishery has occurred each year with harvests ranging from 2,200 to 6,500 salmon (Table 12).

#### The Kenaitze Tribal Fishery

This fishery, granted to the Kenaitze Tribe under a consent preliminary injunction issued in 1989 from the U.S. District Court, was continued for 1990 by a second injunction. A third injunction, slightly modified from the 1989 and 1990 injunctions, was granted in 1991 after the Superior Court ruled that the emergency regulations, as enacted by the Department were invalid. injunction was granted for the 1992 season prior to the decision in the Morry case. Under the terms of the injunction, the Kenaitze Tribe was issued a single permit allowing the bearer, who must be a tribal member domiciled in Game Management Units 7 or 15 (the Kenai Peninsula), to operate a single 10-fathom set gillnet having a mesh size no greater than 8.5 inches in the Kenai River downstream from a point one-quarter mile above the Warren Ames Bridge and including those marine waters adjacent to the river mouth normally closed to commercial salmon fishing. Fishing was permitted each day on a 24-hour basis from June 1 to September 1 and from September 16 to September 30. Fishing was to cease when a total of 5,000 salmon had been harvested. A total harvest quota of 300 chinook salmon was also in effect after which all chinook would be released alive. A third provision of this permit allowed for a harvest quota of no more than 500 coho salmon taken after September 15. Fishing occurs primarily in marine waters south of the mouth of the Kenai River and occasionally in an area known as the "Birches", a prominent stand of birch trees on the south bank of the river immediately upstream of the Warren Ames Bridge. The sockeye harvest, as reported by the tribal office has ranged from 2,212 to 3,477 (Table 13).

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Table 1. Upper Cook Inlet subsistence gill net and dip net fishing periods by area, 1991.

Area	May	June	July	Aug.	Sept.			
West Side except Tyonek (Gill Net Only)	25	5, 8	3, 6, 10, 13, 17 20, 24, 27, 31	3, 17	7, 11, 21			
East Side from 1 mile north of Ninilchik north to "Blanchard Line" (Gill Net Only)	25	5, 8	3, 6, 10, 13, 17 20, 24, 27, 31	3, 17	7, 11, 21			
East Side from "Blanchard Line" north to Boulder Point (Gill Net Only)	25		3, 6, 10, 13, 17 20, 24, 27, 31	3, 17	7, 11, 21			
Boulder Point north to Point Possession (Gill Net Only)	25	5, 8	3, 6, 10, 13, 17 20, 24, 27, 31	3, 17	7, 11, 21			
Mouth of Kenai River (Dip Net Only)	25	1, 8, 15 22, 29	3, 6, 10, 13, 17 17, 20, 24, 29 27, 31	3, 7, 10, 14 17, 21, 24 28, 31	4, 7, 11, 14 18, 21, 25 28			
Mouth of Kesilof River (Dip Net Only)	rer SAME AS MOUTH OF KENAI RIVER							

Table 2. Number and percent of Upper Cook Inlet subsistence permits issued by city of residence, 1991.

	Number of		Broad
	Permits	Percent	Geographic
Community	Issued	of Total	Area
Anchorage	2,776	0.39	Anchorage
Elmendorf AFB	26	0.00	Anchorage
Ft. Richardson	20	0.00	Anchorage
Indian	2	0.00	Anchorage Are
Chugiak	107	0.02	Anchorage Are
Bird Creek	1	0.00	Anchorage Are
Eagle River	267	0.04	Anchorage Are
Girdwood	40	0.01	Anchorage Are
Homer	193	0.03	Kenai Peninsu
Seward	38	0.01	Kenai Peninsu
Sterling	124	0.02	Kenai Peninsu
Moose Pass	6	`0.00	Kenai Peninsu
Anchor Point	85	0.01	Kenai Peninsu
Cooper Landing	. 4	0.00	Kenai Peninsu
Ninilchik	116	0.02	Kenai Peninsu
Clam Gulch	43	0.01	Kenai Peninsu
Nikiski	217	0.03	Kenai Peninsu
Kasilof	224	0.03	Kenai Peninsu
Seldovia	5	0.00	Kenai Peninsu
Soldotna	865	0.12	Kenai Peninsu
Kenai	1,079	0.15	Kenai Peninsu
Норе	3	0.00	Kenai Peninsu
Tyonek	4	0.00	Kenai Peninsu
Trapper Creek	3	0.00	Mat-Su Valley
Sutton	6	0.00	Mat-Su Valley
Wasilla	431	0.06	Mat-Su Valley
Willow	17	0.00	Mat-Su Valley
Beluga	2	0.00	Mat-Su Valley
Big Lake	25	0.00	Mat-Su Valley
Skwentna	2	0.00	Mat-Su Valley
Palmer	233	0.03	Mat-Su Valley
Talkeetna	10	0.00	Mat-Su Valley
Chickaloon	2	0.00	Mat-Su Valley
Gakona	ī	0.00	Mat-Su Valley
Houston	4	0.00	Mat-Su Valley
Alexander Creek	i	0.00	Mat-Su Valley
Glennallen	1	0.00	Mat-Su Valley
Happy Valley	1	0.00	
Alakanuk	1	0.00	Other
Central	1	0.00	Other
North Pole	15		Other
Fairbanks	15 24	0.00	Other
		0.00	Other
Mountain Village Sitka	. 2	0.00	Other
JILKA	· C	0.00	<u>Other</u>

Table 2. (page 2 of 2)

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			Broad
	Number of	Percent	Geographic
Community	Permits	Of Total	Area
Kodiak	3	0.00	Other
College	2	0.00	Other
Wainwright	• 1	0.00	Other
Petersburg	1	0.00	Other
Barrow	2	0.00	Other
Valdez	1	0.00	Other
Tuluksak	1	0.00	Other
Delta Junction	1	0.00	Other
Manley	1	0.00	Other
Juneau	4	0.00	Other
Anderson	1	0.00	Other
Russian Mission	1	0.00	<b>Other</b>
McCarthy	1	0.00	Other
Other Other	4	0.00	Other
Whittier	1	0.00	Other
Steese .	1	0.00	Other
Nome	1	0.00	Other
Eagle	1	0.00	Other
Dillingham	.1	0.00	Other
Mendenhall	2	0.00	Other
Healy	. 1	0.00	Other
Hyder	1	0.00	Other
Copper Center	3	0.00	Other
<u>Eielsen AFB</u>	1	0.00	Other
Total	7.065		

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Table 3. Subsistence catch<sup>1</sup> by gear, area and species, Upper Cook Inlet, 1991.

Subdistrict/Gear	Specific Area		Chinook	Sockeye	Coho	Pink	Chum	Total
Central Dip Net								
Upper	Kenai River	25-May	15	240	0	0	0	255
appa.	Kanar Kirrer	24-Jul	16	7,949	68	9	1	8,043
		31-Jul	8	1,639	30	8	1	1,686
	•	03-Aug	5 0	389 251	,3	0 0	. 0	397 296
		07-Aug Subtotal	44	10,468	45 146	17	2	10,677
				-				
	Kasilof River	25-May 24-Jul	2 7	24 692	0	0 3	0	26 702
		31-Jul	ó ·	126	ŏ	Ŏ	ŏ	126
		03-Aug	ŏ	40	ĭ	Ö	ŏ	41
		07-Aug	1	25	1	0	0	27
		Subtotal	10	907	2	3	0	922
	Dip Net Total		54	11,375	148	20	2	11,599
Central Set Net								
Upper	Ninilchik	25-May	50	115	0	0	0	165
• • • • • • • • • • • • • • • • • • • •		24-Jul	7	494	3	4	0	508
		31-Jul	4	81	3	3	0	91
		03-Aug Subtotal	<u>1</u> 62	15 705	12 18	11	0	32 796
							_	
	Cohoe	25 - May	25 70	56 2204	0	0	0	2 704
		24 - Jul 31 - Jul	30 0	2296 83	56 2	9 0	5 0	2,396 85
		03-Aug	ŏ	70	4	ŏ	Ö	74
		Subtotal	55	2,505	62	ğ	5	2,636
	Kalifonsky	25-May	31	323	<b>1</b> ~4	. 0	0	360
		24-Jul	15	× 1	**************************************	20	6	7,459
		31-Jul				0	6	823
		03-Aug Subtotal				20	0 12	265 8,907
	Salamatof	25 - May	20 9	112	0	0	0	132
		24-jul 31-jul	2	3729 519	98 31	25 0	13 1	3,874 553
		03-Aug	ō	130	25	13	ó	168
		Subtotal	31	4,490	154	38	14	4,727
Kalgin Island		25-May	2	28	0	0	0	30
		24 - Jul	0	12	0	Ó	0	12
		31-Jul	0	0	0	0	0	_0
		03-Aug Subtotal	1 3	31 71	6	0	0	38 80
V.,				_	_	•	-	
Kustatan		25-May	0	0	0	0	0	0
		24-Jul 31-Jul	0	11 1	31 39	0 1	0	42 41
		03-Aug	ŏ	ò	0	Ö	ŏ	70
		Subtotal	0	12	70	1	Ö	83
Western		25-May	8	47	0	0	0	55
		24-Jul	i i	189	116	3	24 3	55 <b>33</b> 5
		31-Jul		10	_!	6	3	20
		03-Aug Subtotal	11	247	<u>34</u> 151	9	<u>0</u> 27	35 445
Chinitna Bay								
continuo say		25-May 24-Jul	0 0	0	0 0	0 0	. 0	0
		31-Jul	ŏ	ŏ	ŏ	Ŏ	Ö	Ö
		puA-E0	0	<u> </u>	40	0	0	40
		Subtotal	0	0	40	0	0	40

Table 3. (page 2 of 2)

Subdistrict/Gear	Specific Area	Chinook	Sockeye	Coho	Pink	Chum	Total
Northern Set Net				•			-
General	25-May 24-Jul <u>03-Aug</u> Subtotal	13	31 905 153 1,089	3 583 357 943	0 45 39 84	20 269 100 389	100 1,815 649 2,564
Eastern	25-May 24-Jul <u>03-Aug</u> Subtotal	13	23 231 40 294	56 6 66	0 3 . 3	10 0 0	57 303 49 409
Knik Arm	25-May 24-Jul <u>03-Aug</u> Subtotal	11 5 5 21	35 2144 773 2,952	0 789 909 1,698	189 146 339	2 649 488 1,139	52 3,776 2,321 6,149
Northe	rn District Set Net Tota	L 113	4,335	2,707	429	1,538	9,122
	Grand Total	550	32,230	3,520	537	1,598	38,435

<sup>&</sup>lt;sup>1</sup> Harvest figures with 75 percent of returned permits. Does not include Tyonek subsistence harvest or any personal use fisheries.

Table 4. Number of permits fished by day in the Upper Cook Inlet subsistence fishery, 1991.

Fishing						
	25-May	24-Ju1	31-Jul	03-Aug	07-Aug	TOTAL
Ninilchik	15	28	6	4	0	53
Cohoe	20	104	8	3	Ö	135
K-Beach	36	313	60	21	Ō	430
Salamatof	15	131	27	7	0	180
Kalgin Island	3	1	0	. 4	0	8
Chinitna Bay	1	0	0	1	. 0	2
Western	3	13	1	2	Ō	19
Kustatan	0	1	1	0	0	2
Northern D. Eas	t 9	17	0	3	0	29
Knik	9	106	0	72	0	187
Northern D. Wes	t 20	56	0	21	0	97
Kasilof River	8	90	23	11	6	138
Kenai River	_38	797	232	87	46	1,200
Total	177	1,657	358	236	52	2,480

Table 5. Upper Cook Inlet subsistence gill net and dip net fishing periods by area, 1992.

				Month			
Area	May	June	July	Aug.	Sept.		
West Side except Tyonek (Gill Met Only)	23	3, 13	1, 4, 8, 11, 15 18, 22, 25, 29	1, 15	5, 9, 19		
East Side from 1 mile north of Ninilchik north to "Blanchard Line" (Gill Net Only)	23	3, 13	1, 4, 8, 11, 15 18, 22, 25, 29	1, 15	5, 9, 19		
East Side from "Blanchard Line" north to Boulder Point (Gill Net Only)	16, 23		1, 4, 8, 11, 15 18, 22, 25, 29	1, 15	5, 9, 19		
Boulder Point north to Point Possession (Gill Net Only)	23	3, 13	1, 4, 8, 11, 15 18, 22, 25, 29	1, 15	5, 9, 19		
Mouth of Kenai River (Dip Net Only)	16, 23, 30	6, 13 20, 27	1, 4, 8, 11, 15 18, 22, 25, 29	1, 5, 8, 12, 15 19, 22, 26, 29	2, 5, 9, 12, 16 19, 23, 26, 30		
Mouth of Kasilof River (Dip Net Only)		SAME AS MO	OUTH OF KENAI RIVER				

Subsistence catch<sup>1</sup> by gear, area and species, Upper Cook Inlet, reports received as of 10/23/92. Table 6.

Subdistrict/Gear	Specific Area	Chinook	Sockeye	Coho	Pink	Chum	Total
Central Dip Net							
Upper	Kenai River Kasilof River	141 24	14,974 1,230	1,403	283	74	17,175 1,281
	Dip Net Total	165	16,204	1,427	586	74	18,456
Central Set Net							
Upper	Ninilchik	49	1,199	153	45	-	^
	Cohoe	147	4,458	632	88 273	12	5,337
	Salamatof	71	3,835	969	132	133 24	5,031
Kalgin Island		<b>&amp;</b>	201	24	0	က	236
Kustatan		0	31	36	0	က	70
Western Chimitan Roy		ယ င	384	149	o c	4 0	562
Central Central	District	760	10.00				
196	ספר וופר וסומו	100	10, 504	3,733	24/	017	63,910
Northern Set Net				·			
General		317	3,123	2,072	293	551	6,356
Eastern		4	497	329	16	4	820
Knik Arm		120	4,923	2,125	339	875	8,382
Northern Set Net	Northern District Set Net Total	441	8,543	4.526	648	1 430	15 588

<sup>1</sup> Preliminary harvest figures with approximately 41 percent of the permits returned. Does not include Tyonek subsistence harvest or any personal use fisheries.

57,960

1,781

9,688

43,711

**Grand Total** 

Table 7. Tyonek Subdistrict Subsistence salmon harvest, Upper Cook Inlet, 1980-1992.

	No. of Permits	Chinook	Sockeye	Coho	Pink	Chur
1980	67	1,927	261	0	0	0
1981	70	2,002	269	62	32	13
1982	69	1,574	274	113	15	4
1983	73	2,755	251	78	0	6
1984	70	2,364	310	66	3	23
1985	176	1,967	163	91	0	10
1986	101	1,674	198	210	45	44
1987	64	1,552	161	149	10	24
1988	47	1,474	53	185	6	9
1989	49	1,202	67	70	Ō	ì
1990	42	797	92	366	124	10
1991	51	842	20	72	0	0
1992 <sup>1</sup>	57	872	88	161	10	28

<sup>&</sup>lt;sup>1</sup> 1992 data is preliminary.

Table 8. Kasilof River personal use gillnet salmon harvest by year, Upper Cook Inlet, 1982-1992.

	No. of Permits	Chinook	Sockeye	Coho	Pink	Chun
1982	649	372	7,543	24	17	0
1983	684	307	8,846	0	0	0
1984	698	165	12,926	0	0	0
1985	692	203	10,746	. 0	Ó	0
1986	N/Ā	168	9,609	Ó	0	0
1987	N/A	184	9,375	Ô	0	0
1988	N/A	118	9,803	Ö	Ö	Ō
1989	N/A	186	9,928	0	0	0
1990	N/A	133	7,123	Ô	Ö	0
1991	N/A	34	8,380	Ö	Ö	Ö
1992	No Fishery due			•	-	•

Table 9. Fall coho personal use and subsistence salmon harvest, Upper Cook Inlet, 1983-1992.

	No. of Permits	Chinook	Sockeye	Coho	Pink	Chur
1983	295	0	0	712	0	0
1984	309	1	. 2	2,261	10	7
1985	998	50	805	11,265	108	53
1986	892	0	0	2,422	0	0
1987	486	8	9	2,213	2	37
1988	449	2	19	2,662	38	10
1989	365	0	0	2,376	0	0
1990	420	Ŏ	Ö	2,290	Ō	Ō
1991	360	Ŏ	10	2,703	Ö	8
1992	No Fishery due	to subsist		_,,	•	

Table 10. Kenai River personal use dip net fishery summary, 1981 - 1991.

Y Ber	Date and Time Opened	Date and Time Date and Time Opened Closed	Total	Fish Available During Dip Net Fishery <sup>a</sup>	Harvest	% of Available Fish Harvested	Total Sockaye Salmon Escapement	Percent of Escapement Harvested	t of Escapement Available to	Participation
q 1861	۵			No Fishery			403 600			(Dougla sked)
1982 b	b 7/26 18:00	8/5 24:00	9.25	Insignificant			619,800	•		
1983	7/20 18:00	8/ 5 24:00	15.25	Insignificent			630,000	• •	insignificant	
1984				No Fishery			344,570		300714.51	
1985				No Fishery			502,800			
1986				No Fishery			501,160			
1987	1/23 12:00	B/ 5 24:00	13.50 ••		24,090	3.0	1,600.000	-		
1988	7/22 18:00	8/ 5 24:00	14.25 ••		16,880	s. 9			47.2	22,550
1989	7/21 00:01	8/ 5 24:00	15.0 ••	•	48,980	0.9	1,598,000		26.0	29,010
1990	No Fishery	<b>&gt;</b>					659,520		6. 6.	31, 310
He A			13.45	0	29,980	5.2	786.350			
1991	No Fishery							T:	7:	27,623
							238,000			

Total number of fish passing sonar counters during fishery, plus harvest.

Table 11. Kasilof River personal use dip net fishery summary, 1981 - 1991.

Year	Date and Time Opened	Date and Time Closed	Total Days	Fish Available During Dip Not Fishery <sup>a</sup>	Harvest	V OI Available Fish Harvested	iotai Sockeye Salmon Escapement	Percent of Escapement Marvested	or Escapement Available to Fishery	Participation (Days Fishad)
1981 P	7/ 4 12:00	7/31 24100	27.50	122,080	10, 300	1.8	256,630	4.0	47.6	5,370
1982 b	7/21 12:00	8/ 5 24100	15.50	36,930	1,800	6.4	180,240	1.0	20.5	2,580
1983	7/15 24:00	8/ 5 24:00	21.00	005'96	11,120	11.5	210,270	5.3	45.9	4,420
1984	7/16 12:00	8/ 5 24:00	20.50	126,930	12,770	10.1	231,690	. s.	54.8	5,960
1985	7/15 18:00	8/5 24:00	21.25	363,590	16,280	. 5.4	050,205	3.2	72.0	9,260
1986	7/15 06:00	8/5 24:00	21.75	138,500	38,670	27.9	275,960	14.0	50.2	13,930
1987	7/10 12:00	8/ 5 24:00	25.50 G	135,560	18,450	13.6	249,250	1.4	54.4	8,910
1988	7/22 18:00	8/ 5 24:00	14.25	12,950	3,550	27.4	200,000	1.6	8.9	6,930
1989	No Fishery						967,731			
0661	No Fishery						144,140			
Hean			20.91	129,130	14,120	13.5	241,100	5.3	0.44.0	0 11,1
1661	No Fishery						238,000	0		

Total number of fish passing sonar counters during fishery, plus harvest.

Harvest and participation during first two years of fishery are field estimates. Starting in 1983, data is from Statewide Harvest Study.

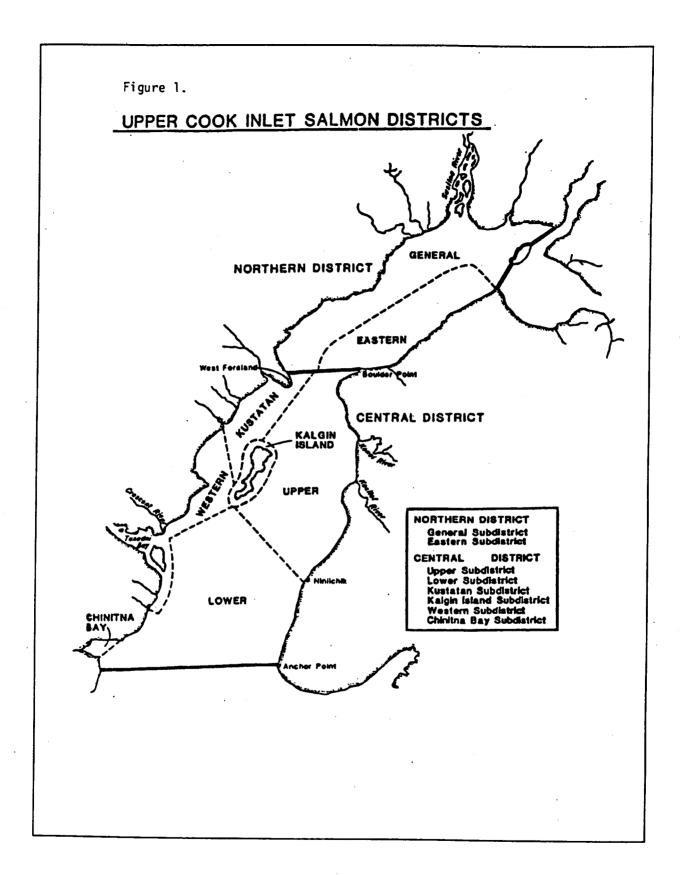
The fishery was closed from 6:00am 7/14 - 6:00 7/15 as a precautionary measury due to possible oil contar

Table 12. Fish Creek personal use dip net fishery summary, 1987-1992.

Fishery	No. of Permits	Chinook	Sockeye	Coho	Pink	Chum
1987	N/A	0	2,200	0	0	0
1988	N/A	0	3,000	. 0	0	0
1989	N/A	0	5,000	0.	0	0
1990	N/A	Ó	6,500	Ö	0	Ó
1991	N/A	Ŏ	10,459	Ö	Ö	Ó
1992	N/A	Ö	12,103	Ŏ	Ö	Ŏ

Table 13. Salmon harvest in the Kenaitze Tribal fishery, Upper Cook Inlet, 1989-1992.

Fishery	No. of Permits	Chinook	Sockeye	Coho	Pink	Chum
1989	N/A	95	2,212	1,814	0	0
1990	N/A	53	3,477	1,117	326	0
1991	N/A	34	2,965	1,945	4	0
1992	N/A	55	2,280	719	51	0



## UPPER COOK INLET SUBSISTENCE GILL NET AND DIP NET FISHING AREAS

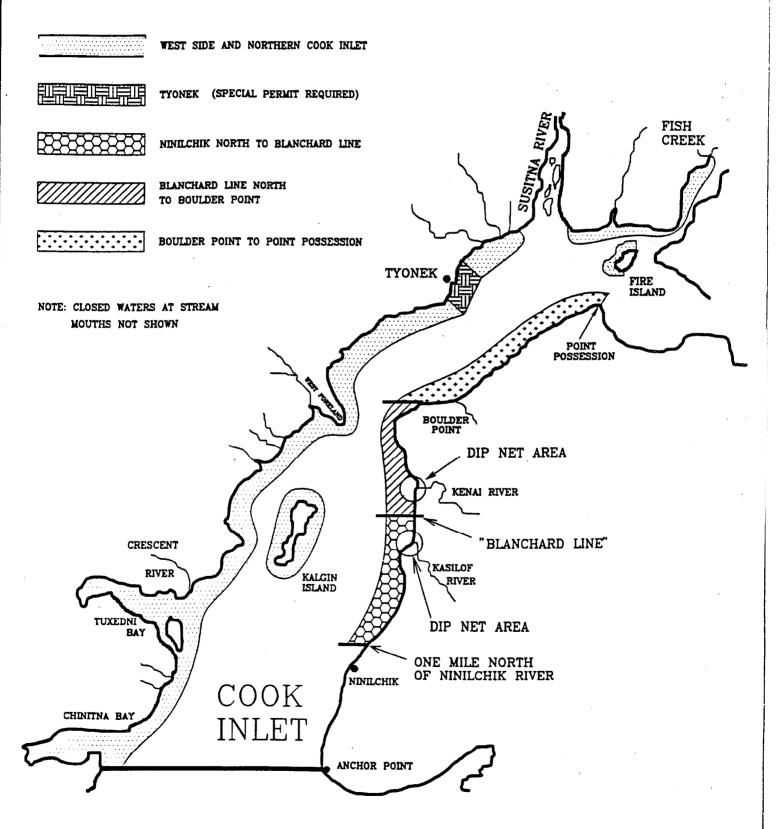


Figure 2. Upper Cook Inlet subsistence areas, 1991.

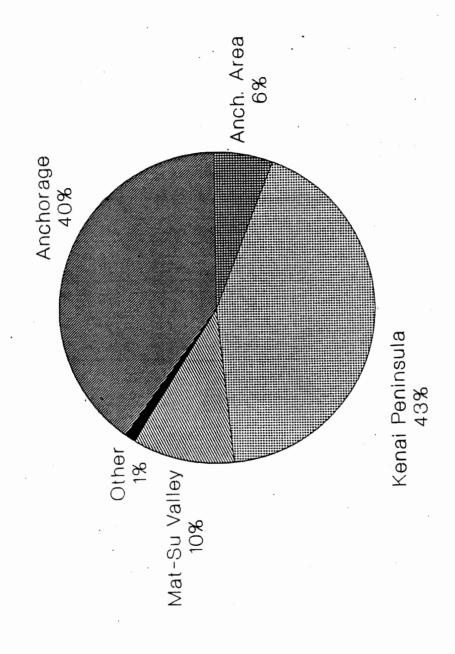


Figure 3. Percent of Subsistence Permits Issued in Upper Cook Inlet by Area of Residence, 1991.

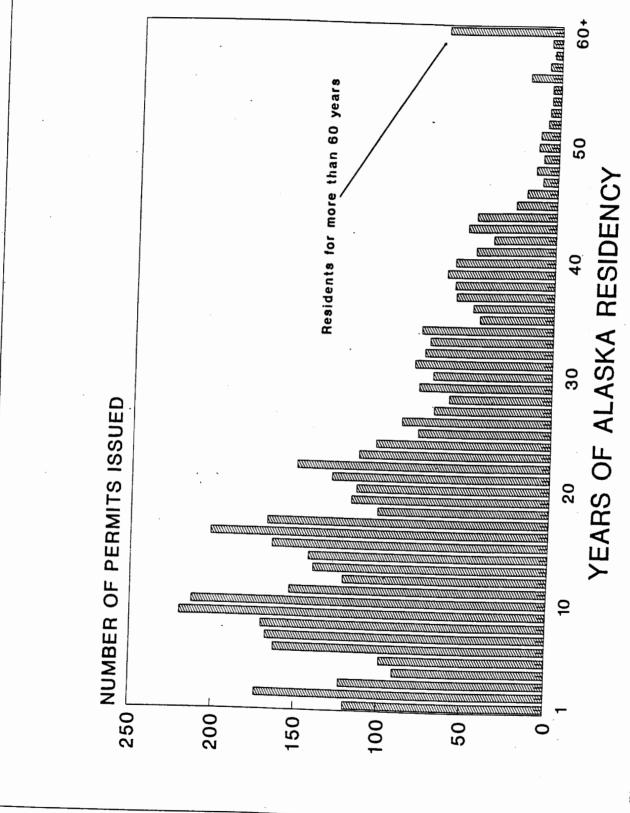


Figure 4. Number of subsistence permits issued by number of years of Alaska residency, 1991.

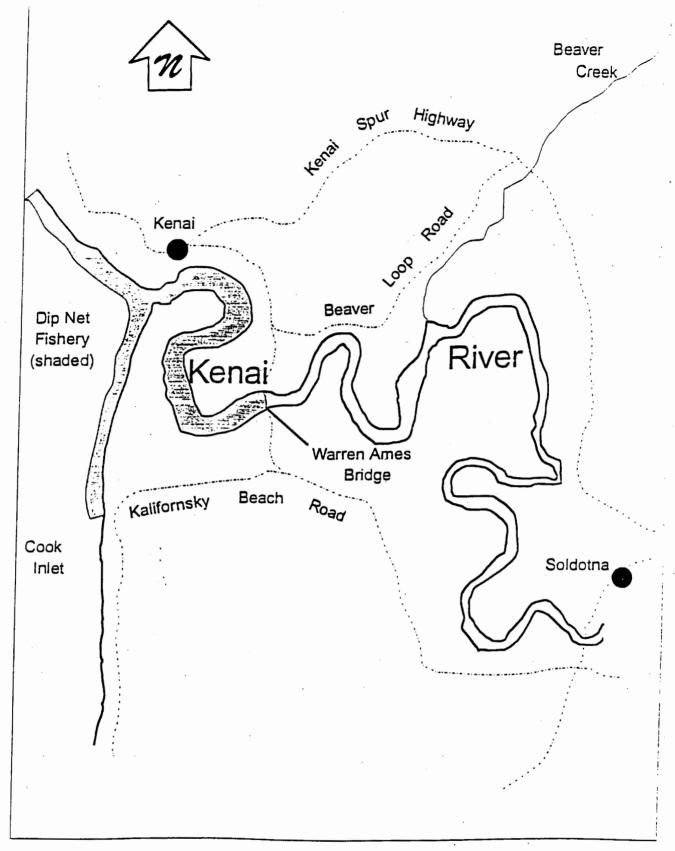


Figure 5. The Kenai River sockeye salmon dip net fishery occurs downstream from the Warren Ames Bridge.

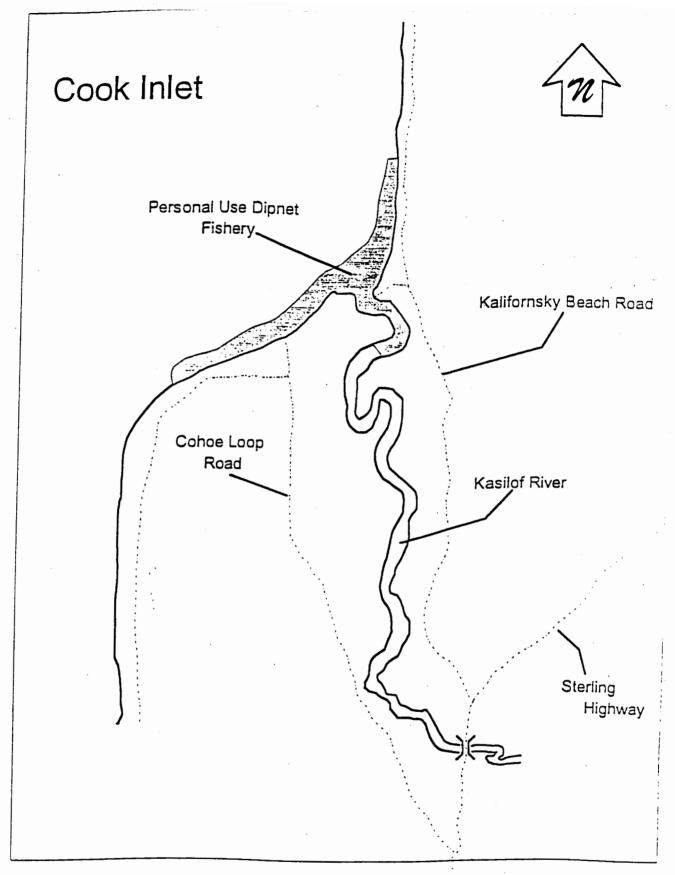


Figure 6. The Kasilof River personal use sockeye salmon dip net fishery.

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				·	
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